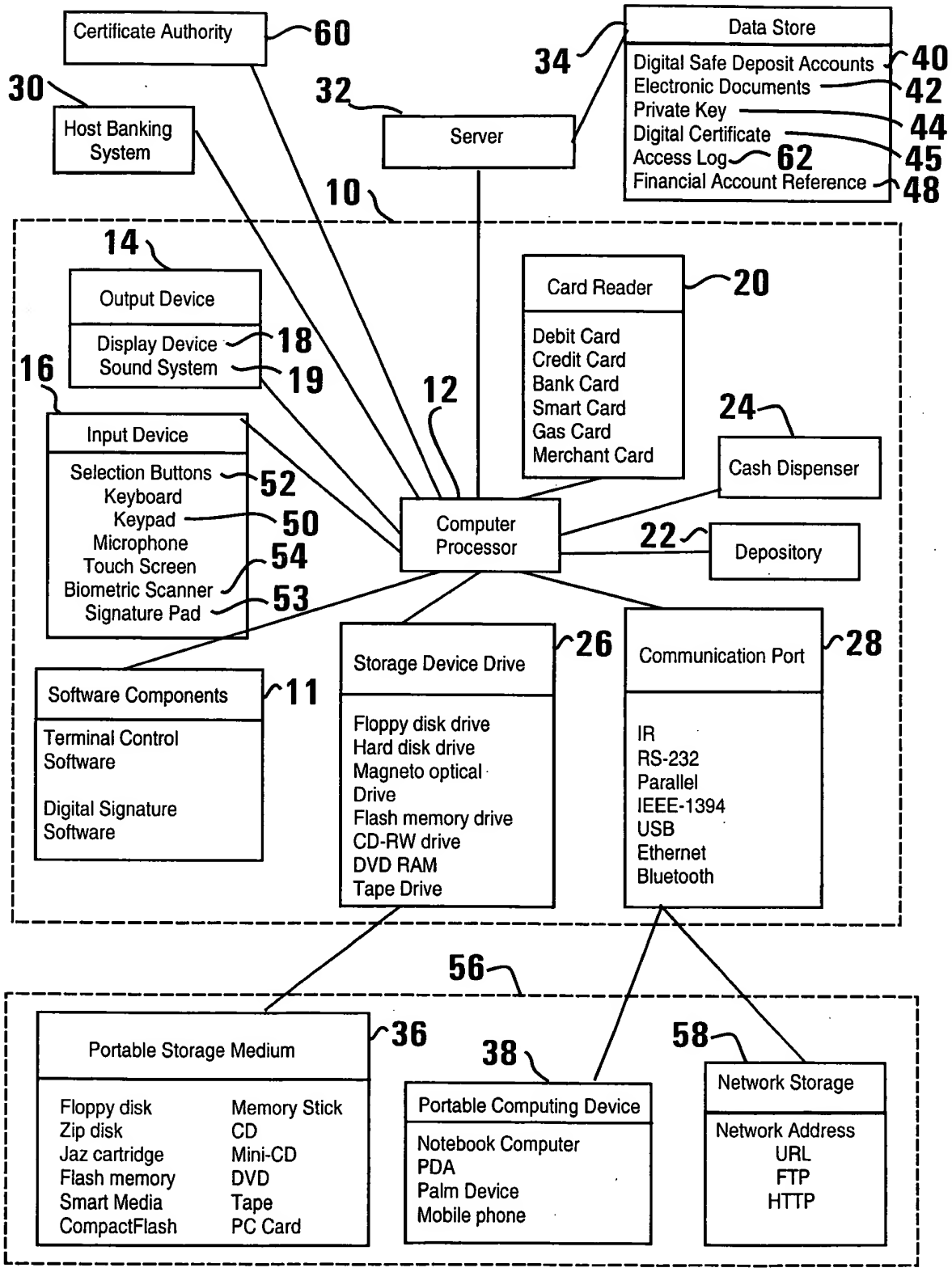

Certificate Authority
60
30
Host Banking System
32
Server
34
Data Store
Digital Safe Deposit Accounts
40
Electronic Documents
42
Private Key
44
Digital Certificate
45
Access Log
62
Financial Account Reference
48
10
14
Output Device
Display Device
18
Sound System
19
16
Input Device
Selection Buttons
52
Keyboard
Keypad
50
Microphone
Touch Screen
54
Biometric Scanner
53
Signature Pad
12
Card Reader
20
Debit Card
Credit Card
Bank Card
Smart Card
Gas Card
Merchant Card
24
Cash Dispenser
Computer Processor
22
Depository
Software Components
11
Terminal Control Software
Digital Signature Software
Storage Device Drive
26
Floppy disk drive
Hard disk drive
Magneto optical Drive
Flash memory drive
CD-RW drive
DVD RAM
Tape Drive
Communication Port
28
IR
RS-232
Parallel
IEEE-1394
USB
Ethernet
Bluetooth
56
Portable Storage Medium
36
Floppy disk
Zip disk
Jaz cartridge
Flash memory
Smart Media
CompactFlash
Memory Stick
CD
Mini-CD
DVD
Tape
PC Card
38
Portable Computing Device
Notebook Computer
PDA
Palm Device
Mobile phone
58
Network Storage
Network Address
URL
FTP
HTTP

FIG. 1

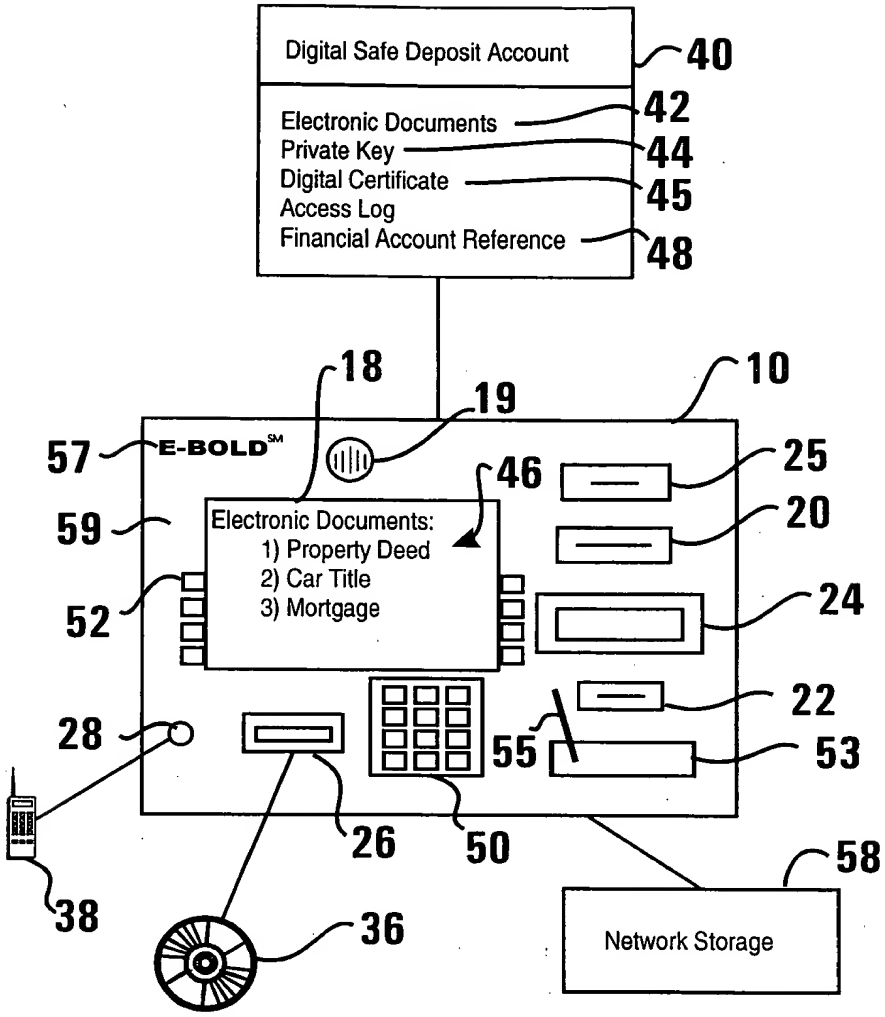

Digital Safe Deposit Account
40
Electronic Documents
42
Private Key
44
Digital Certificate
45
Access Log
Financial Account Reference
48
18
19
10
57
E-BOLD℠
46
25
59
Electronic Documents:
1) Property Deed
2) Car Title
3) Mortgage
20
52
24
22
28
55
53
26
50
58
38
36
Network Storage

FIG. 2

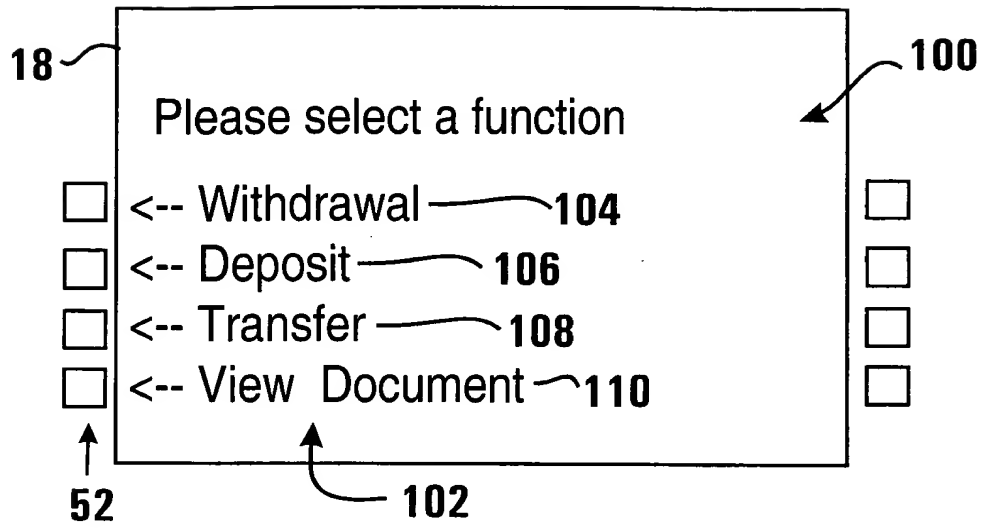

18
100
Please select a function
<-- Withdrawal
104
<-- Deposit
106
<-- Transfer
108
<-- View Document
110
52
102

FIG. 3

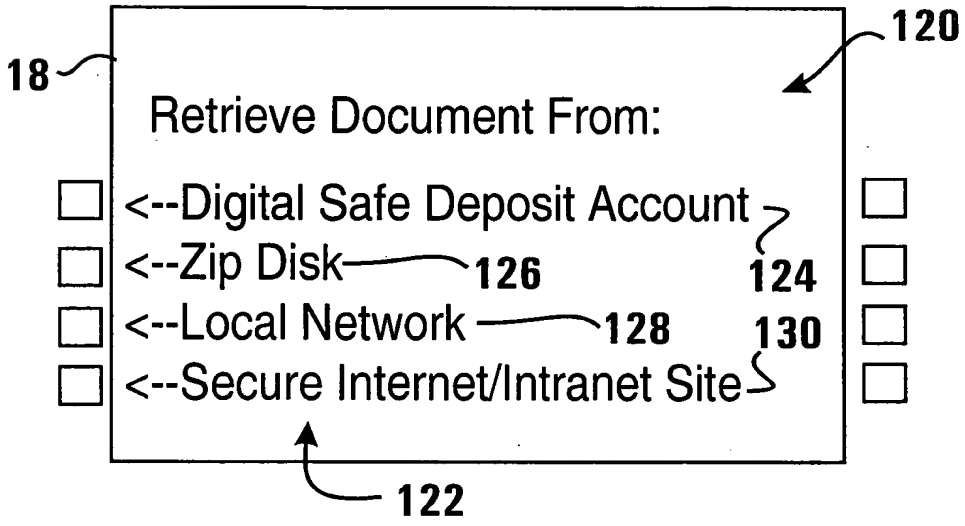

18
120
Retrieve Document From:
<--Digital Safe Deposit Account
<--Zip Disk
126
124
<--Local Network
128
130
<--Secure Internet/Intranet Site
122

FIG. 4

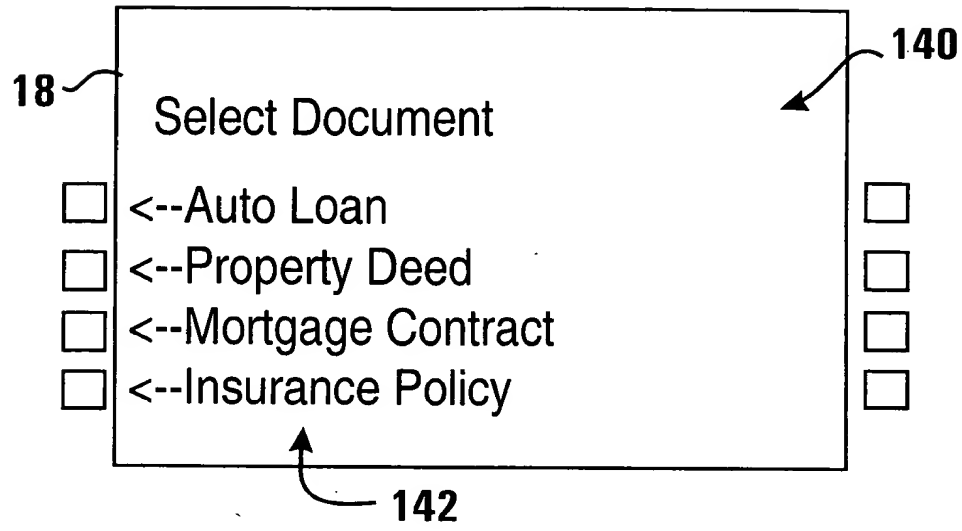

18
140
Select Document
<--Auto Loan
<--Property Deed
<--Mortgage Contract
<--Insurance Policy
142

FIG. 5

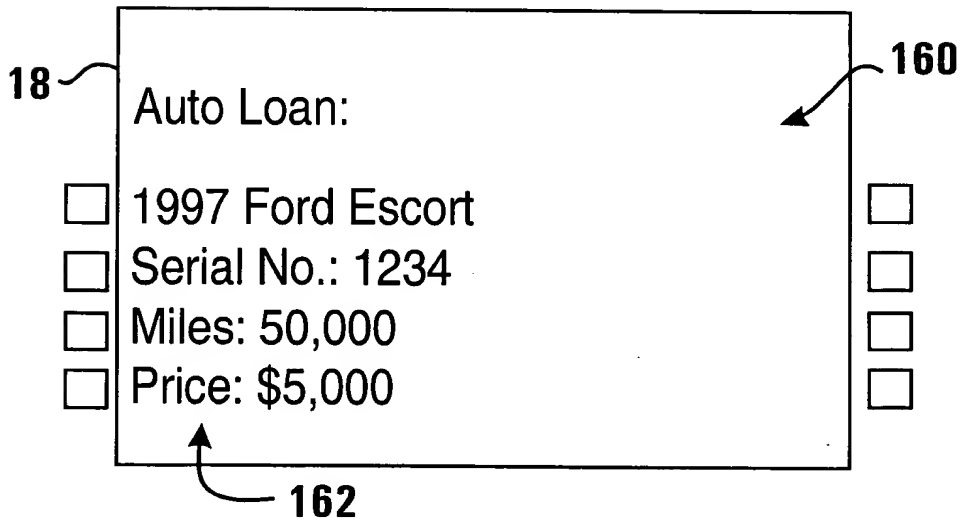

18
160
Auto Loan:
1997 Ford Escort
Serial No.: 1234
Miles: 50,000
Price: $5,000
162

FIG. 6

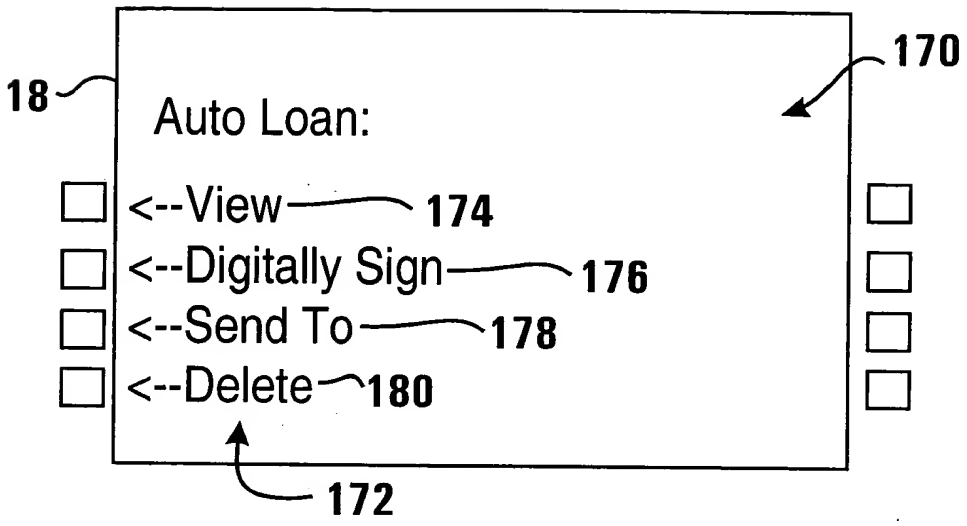

18
170
Auto Loan:
<--View
174
<--Digitally Sign
176
<--Send To
178
<--Delete
180
172

FIG. 7

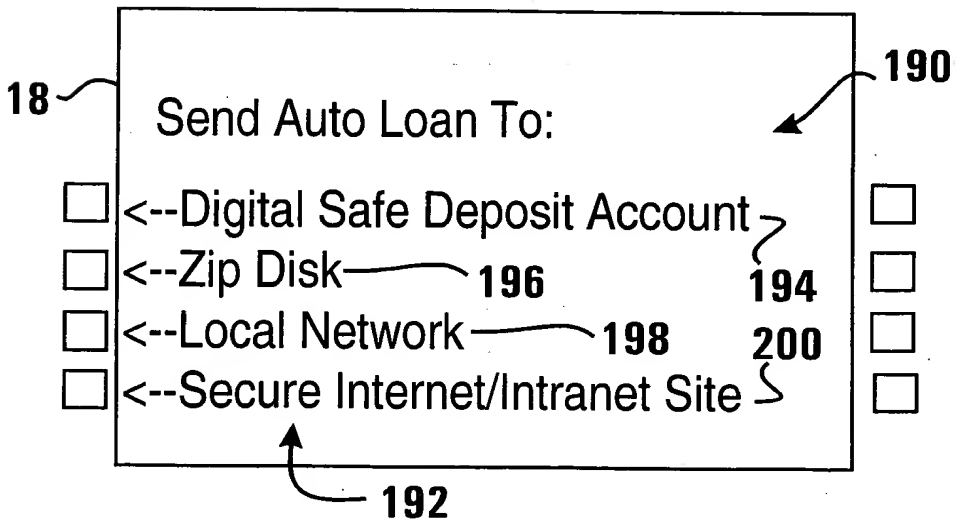

18
190
Send Auto Loan To:
<--Digital Safe Deposit Account
194
<--Zip Disk
196
<--Local Network
198
200
<--Secure Internet/Intranet Site
192

FIG. 8

FIG. 9

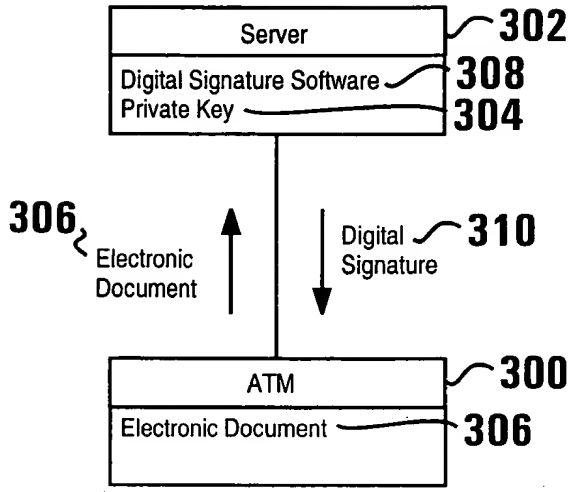


FIG. 10

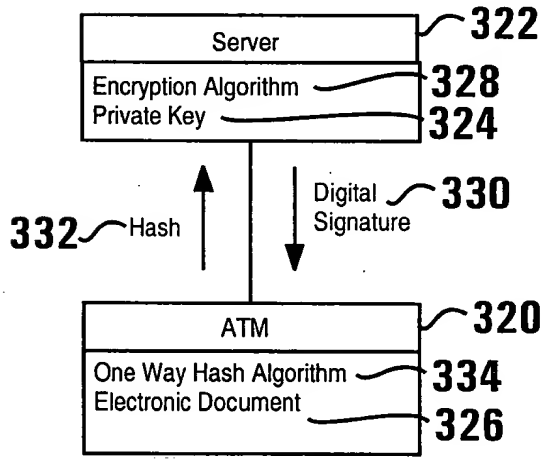


FIG. 11

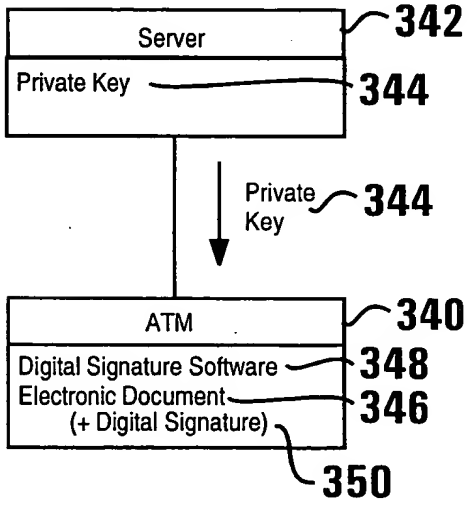


FIG. 12

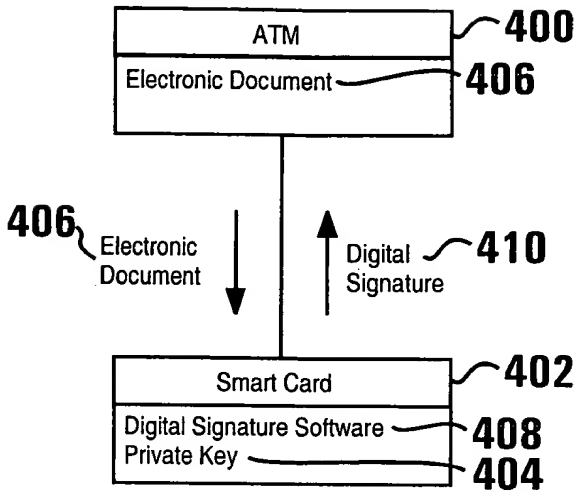


FIG. 13

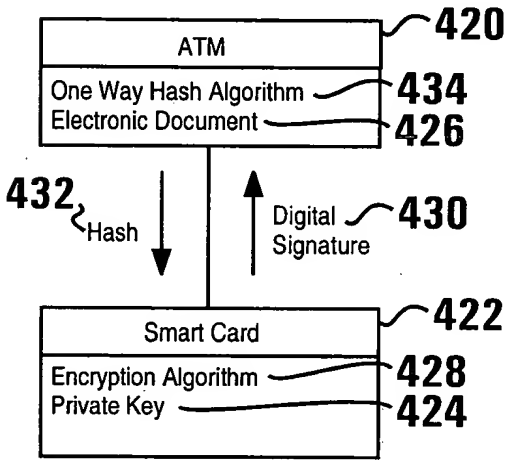
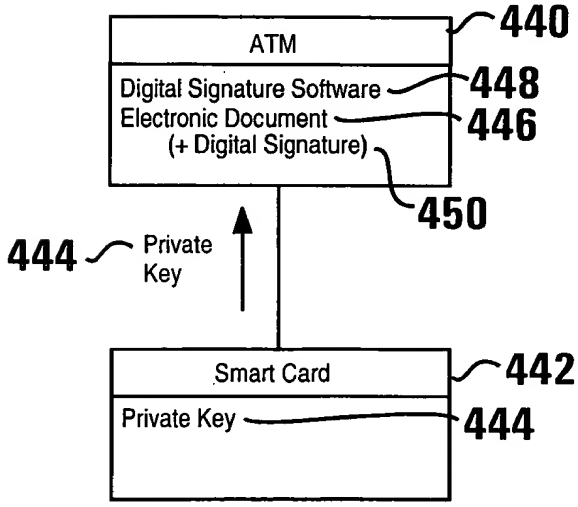


FIG. 14



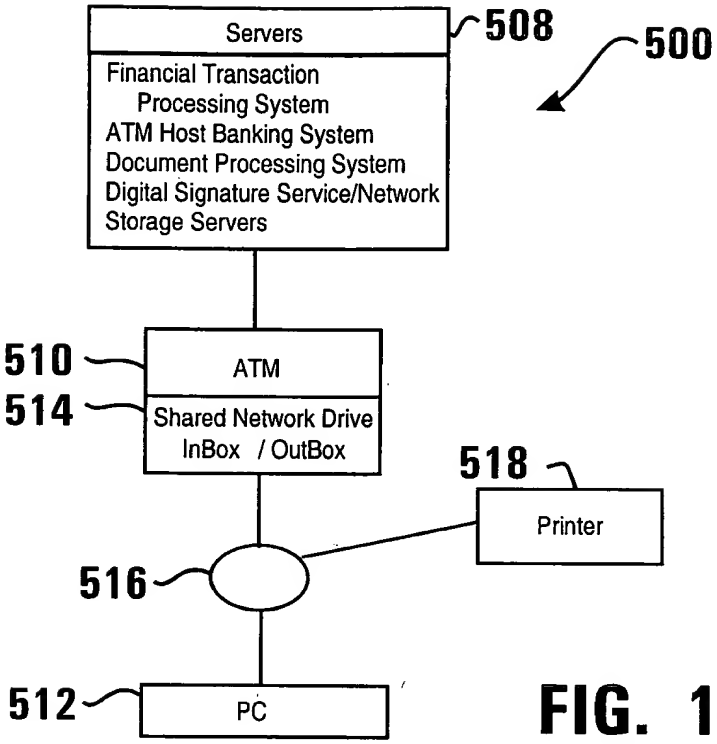

Servers
Financial Transaction Processing System
ATM Host Banking System
Document Processing System
Digital Signature Service/Network
Storage Servers
508
500
510
ATM
514
Shared Network Drive
InBox / OutBox
518
Printer
516
512
PC

FIG. 15

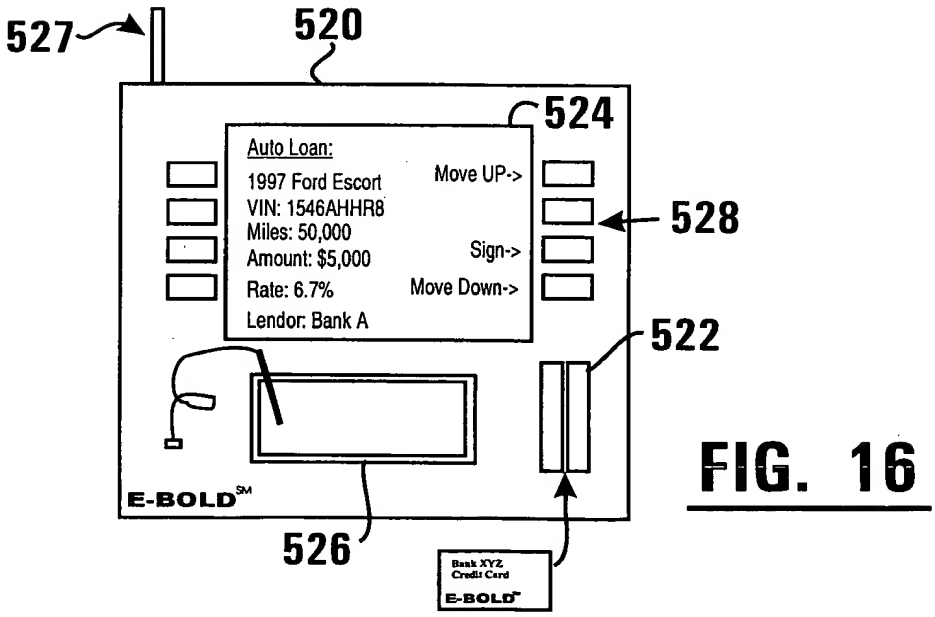

527
520
524
Auto Loan:
1997 Ford Escort
VIN: 1546AHHR8
Miles: 50,000
Amount: $5,000
Rate: 6.7%
Lendor: Bank A
Move UP->
Sign->
Move Down->
528
522
E-BOLD℠
526
Bank XYZ
Credit Card
E-BOLD™

FIG. 16

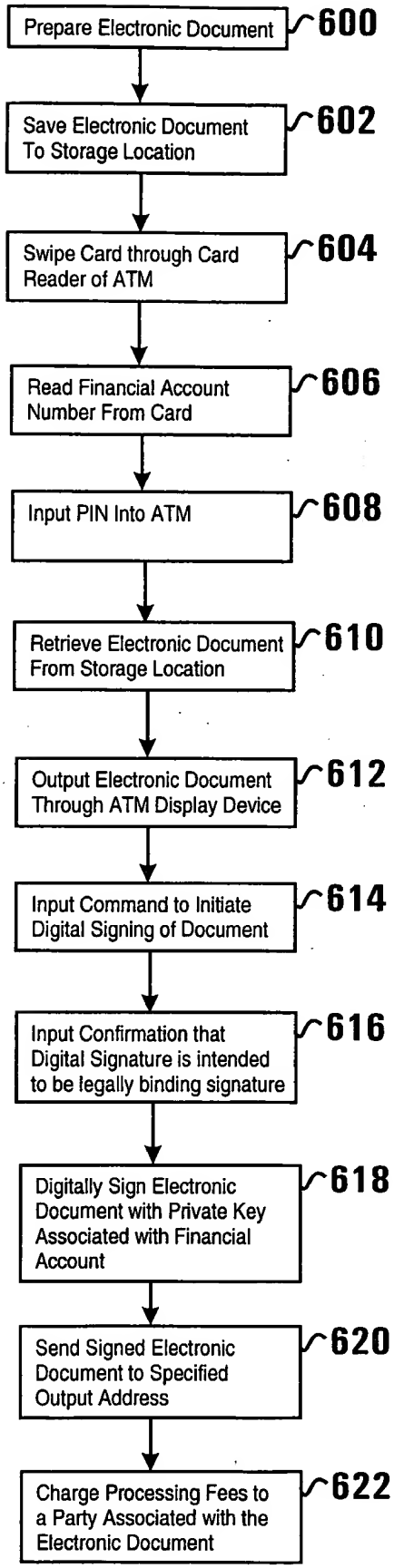

Prepare Electronic Document
600
Save Electronic Document To Storage Location
602
Swipe Card through Card Reader of ATM
604
Read Financial Account Number From Card
606
Input PIN Into ATM
608
Retrieve Electronic Document From Storage Location
610
Output Electronic Document Through ATM Display Device
612
Input Command to Initiate Digital Signing of Document
614
Input Confirmation that Digital Signature is intended to be legally binding signature
616
Digitally Sign Electronic Document with Private Key Associated with Financial Account
618
Send Signed Electronic Document to Specified Output Address
620
Charge Processing Fees to a Party Associated with the Electronic Document
622

FIG. 17

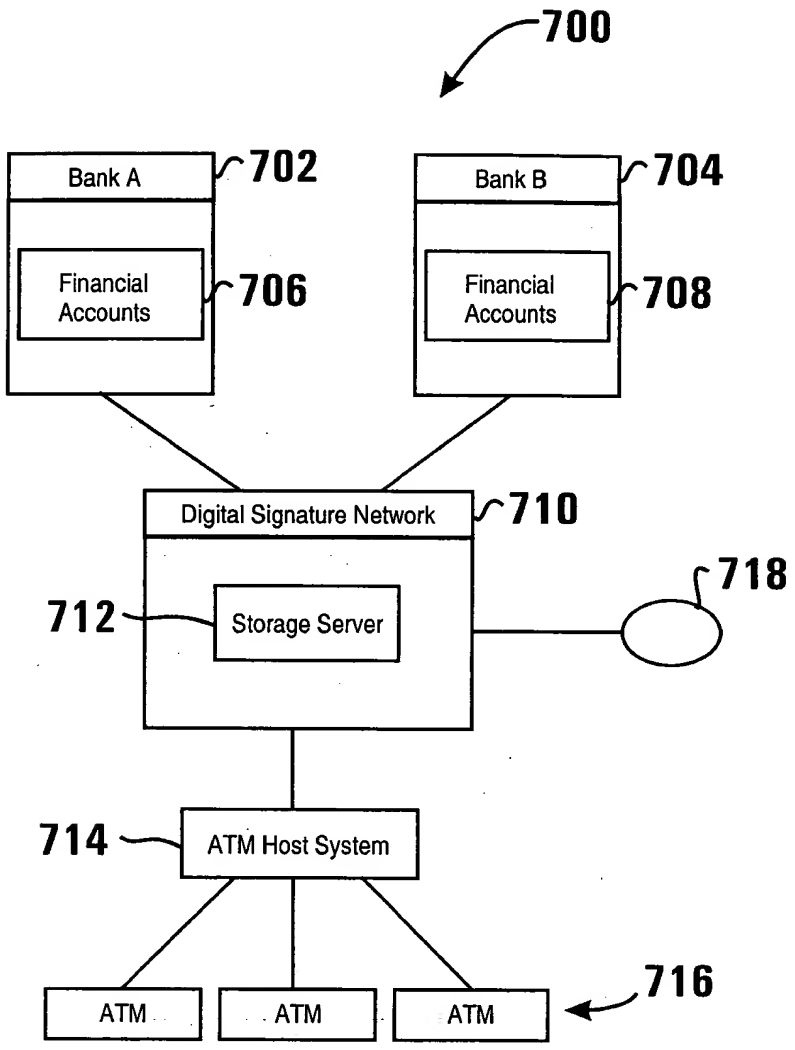

700
Bank A
702
Bank B
704
Financial Accounts
706
Financial Accounts
708
Digital Signature Network
710
718
712
Storage Server
714
ATM Host System
ATM
ATM
ATM
716

FIG. 18

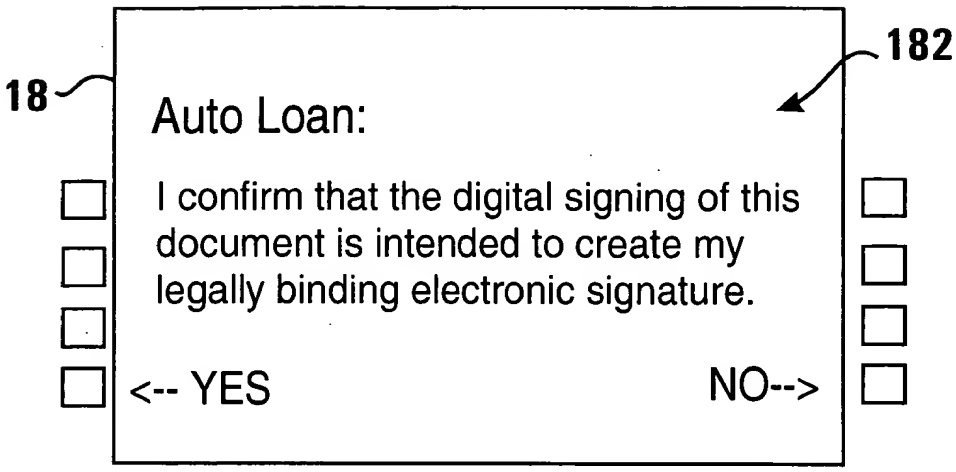

18
182
Auto Loan:
I confirm that the digital signing of this document is intended to create my legally binding electronic signature.
<-- YES
NO-->

FIG. 19